

## CLAIMS

1. A passenger conveyor system, comprising:  
a plurality of steps moveable in a loop;  
a drive member; and  
a stepchain comprising a plurality of stepchain links that are associated with said steps, said stepchain links engaging said drive member such that movement of said drive member results in movement of said steps, said system further including at least one of:  
a number of said stepchain links on one side of said steps being equal to a number of said steps; or  
at least one needle bearing at an interface between adjacent links.
2. The assembly as recited in claim 1, comprising two of said stepchain, each having one of said interfaces associated with each of said steps such that adjacent stepchain links are connected to each other at said interface and wherein each stepchain link extends across a portion of adjacent steps.
3. The assembly as recited in claim 1 wherein each of said stepchain links includes a plurality of teeth that engage a corresponding set of teeth on said drive member and wherein said plurality of teeth are made of an integrated piece of material.
4. The assembly as recited in claim 1 wherein each of said plurality of stepchain links is attached to an adjacent stepchain link by an attachment member, and said at least one needle bearing is positioned between corresponding attachment members and corresponding stepchain links.

5. The assembly as recited in claim 1 wherein each of said plurality of steps includes a tread surface having a rear edge and a rise surface extending near a front edge of said tread surface, and said rear edge of each said tread surface moves along an arc of a circle as said plurality of steps move between an inclined portion and an adjacent landing portion of said passenger conveyor system.

6. The assembly as recited in claim 5 including a constant spacing between said rear edge of said tread surface of one of said plurality of steps and said rise surface of an adjacent one of said plurality of steps.

7. The assembly as recited in claim 1 including a constant spacing between said steps throughout movement of said steps along said loop.

8. The assembly as recited in claim 1 including a drive mechanism located in an inclined portion of said passenger conveyor system that drives said drive member and said plurality of stepchain links.

9. The assembly as recited in claim 1 wherein said plurality of teeth of said plurality of stepchain links have a substantially constant pitch which is substantially constant across a span between adjacent teeth.

10. The assembly as recited in claim 1 wherein each said stepchain link comprises a single piece of die cast metal.

11. The assembly as recited in claim 10 wherein said die cast metal is selected from the group consisting of aluminum and magnesium.

12. The assembly as recited in claim 10 wherein each of said stepchain links includes a first end having a hole and a second end having two spaced apart portions, each including a hole, said first end of one of said stepchain links is received at least partially between said second end portions of another of said plurality of stepchain links, and including an attachment member received through said holes to secure said first end of said one stepchain links to said second end of said another stepchain link, and further including needle bearings positioned between said holes of said two spaced apart portion of said second end and said attachment member.

13. A passenger conveyor system comprising:  
a plurality of steps moveable in a loop;  
a drive member; and  
a plurality of stepchain links that are associated with said steps, said stepchain links engaging said drive member such that movement of said drive member results in movement of said steps, said steps and said stepchain links each moving along a constant radius arc as said steps transition between an inclined portion and a landing portion of said loop.

14. The system as recited in claim 13, including at least one needle bearing at an interface between adjacent links.

15. The system as recited in claim 13, wherein there is a number of stepchain links associated with each side of said steps and wherein a number of stepchain links on each side of the steps equals a number of steps.